

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

6

Application Number

09/686,737

Filing Date

October 10, 2000

First Named Inventor

XU

Art Unit

1641

Examiner Name

DO, Pensee

Attorney Docket Number

ART-00102.P.1

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ENCLOSURES (Check all that apply)



Fee Transmittal Form



Fee Attached



Amendment/Reply



After Final



Affidavits/declaration(s)



Extension of Time Request



Express Abandonment Request



Information Disclosure Statement



Certified Copy of Priority Document(s)



Response to Missing Parts/Incomplete Application



Response to Missing Parts under 37 CFR 1.52 or 1.53



Drawing(s)



Licensing-related Papers



Petition



Petition to Convert to a Provisional Application



Power of Attorney, Revocation



Change of Correspondence Address



Terminal Disclaimer



Request for Refund



CD, Number of CD(s) _____



After Allowance Communication to a Technology Center (TC)



Appeal Communication to Board of Appeals and Interferences



Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)



Proprietary Information



Status Letter



Other Enclosure(s) (please identify below):

Remarks

1. Form 1449;
2. 2 Volumes of references; and
2. Return Postcard

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm
or
Individual
Signature

David R. Preston
Reg No. 38710

Date

August 18, 2003

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date:

Alexandria VA 22313

Aug 18 2003

Typed or printed

Raymond W. Jagerkecht

Signature

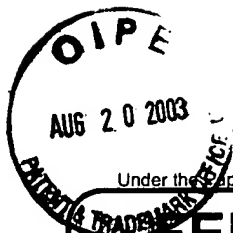
Raymond W. Jagerkecht

Date

Aug 18, 2003

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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PTO/SB/17 (01-03)

Approved for use through 04/30/2003. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$) 0.00

Complete if Known

Application Number	09/686,737
Filing Date	October 10, 2000
First Named Inventor	XU
Examiner Name	DO, Pensee
Art Unit	1641
Attorney Docket No.	ART-00102.P.1

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TECH CENTER 1600/2900**METHOD OF PAYMENT** (check all that apply)☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:Deposit
Account
Number
Deposit
Account
Name

501321

David R. Preston

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) during the pendency of this application☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1001	750	2001	375	Utility filing fee	
1002	330	2002	165	Design filing fee	
1003	520	2003	260	Plant filing fee	
1004	750	2004	375	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) (\$) 0.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

	Extra Claims	Fee from below	Fee Paid
Total Claims	-20** =	X	
Independent Claims	-3** =	X	
Multiple Dependent			

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	84	2201	42	Independent claims in excess of 3
1203	280	2203	140	Multiple dependent claim, if not paid
1204	84	2204	42	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 0.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	410	2252	205	Extension for reply within second month	
1253	930	2253	465	Extension for reply within third month	
1254	1,450	2254	725	Extension for reply within fourth month	
1255	1,970	2255	985	Extension for reply within fifth month	
1401	320	2401	160	Notice of Appeal	
1402	320	2402	160	Filing a brief in support of an appeal	
1403	280	2403	140	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,300	2453	650	Petition to revive - unintentional	
1501	1,300	2501	650	Utility issue fee (or reissue)	
1502	470	2502	235	Design issue fee	
1503	630	2503	315	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	750	2809	375	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	750	2810	375	For each additional invention to be examined (37 CFR 1.129(b))	
1801	750	2801	375	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 0.00

SUBMITTED BY

Name (Print/Type)

David R. Preston

Signature

Registration No.
(Attorney/Agent)

38,710

(Complete if applicable)

Telephone 858-724-9375

Date

8/18/03

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Patent

Docket Number: ART-00102.P.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:)
)
XU et al.) Examiner: DO
)
Application No.: 09/686,737) Art Unit: 1641
)
Filed: October 10, 2000)
)
For: COMPOSITION AND METHODS)
FOR SEPARATION OF MOIETIES)
ON CHIPS)

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Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:


At the Examiner's request, Applicants respectfully re-submit herewith a copy of Applicants' Form PTO 1449 and the References cited on the enclosed Form PTO 1449. This re-submission corresponds to Applicants' Information Disclosure Statement originally mailed March 1, 2001. This filing of duplicate materials is by request of the USPTO, thus no fee is deemed necessary.

Information Disclosure Statement
ART-00102.P.1
Xu et al.

Please apply any charges not covered, or any credits, to **Deposit Account 501321** in the name of David R. Preston & Associates having **Customer Number 24232**.

Respectfully submitted,

Date: August 18, 2003


David R. Preston
Reg. No. 38,710

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Facsimile: 858-724-0384



**INFORMATION DISCLOSURE
STATEMENT
BY APPLICANT**

(Use several sheets if necessary)

Docket Number:
ART-09102.P.1

Application Number:
09/686,737

Applicant: Xu et al.

Filing Date:
October 10, 2000

Group Art Unit:
1641

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U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
	P1	4,160,645	7/10/79	Ullman			
	P2	4,275,149	6/23/81	Litman et al.			
	P3	4,318,980	3/9/82	Boguslaski et al.			
	P4	4,326,934	4/27/82	Pohl			
	P5	4,390,403	6/28/83	Batchelder			
	P6	4,894,443	1/16/90	Greenfield et al.			
	P7	5,344,535	9/6/94	Betts et al.			
	P8	5,454,472	10/3/95	Benecke et al.			
	P9	5,569,367	10/29/96	Betts et al.			
	P10	5,612,474	3/18/97	Patel			
	P11	5,653,859	8/5/97	Parton et al.			
	P12	5,795,457	8/18/98	Pethig et al.			
	P13	5,814,200	9/29/98	Pethig et al.			
	P14	5,858,192	1/12/99	Becker et al.			
	P15	5,883,760	3/16/99	Yamada et al.			
	P16	5,888,370	3/30/99	Becker et al.			
	P17	5,993,630	11/30/99	Becker et al.			
	P18	5,993,631	11/30/99	Parton et al.			
	P19	5,993,632	11/30/99	Becker et al.			

Examiner Signature		Date Considered	
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FOREIGN PATENT DOCUMENTS								
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	Translation	
							YES	NO
	F1	WO 94/16101 A2	7/21/94	PCT				
	F2	WO 94/16101 A3	7/21/94	PCT				

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
EXAMINER INITIALS		CITATION
	D1	Ahn et al., IEEE Trans. Magnetics, 30:73-79 (1994)
	D2	Ahn et al., J. Micromechanical Systems, 5:151-157 (1996)
	D3	Batra et al., Mol. Immunology, 30:379-386 (1993)
	D4	Becker et al., J. Phys. D: Appl. Phys., 27:2659-2662 (1994)
	D5	Becker et al., Proc. Natl. Acad. Sci. USA 92:860-864 (1995)
	D6	Burt et al., J. Phys. E: Sci. Instrum., 22:952-957 (1989)
	D7	Cheng et al., Nat. Biotech., 16:541-546 (1998)
	D8	Cumber et al., Bioconjugate Chem., 3:397-401 (1992)
	D9	De Gasperis et al., Biomedical Microdevices, 2:41-49 (1999)
	D10	Edman et al., Nucleic Acids Res., 25:4907-4914 (1997)
	D11	Fiedler et al., Anal. Chem., 70:1909-1915 (1998)
	D12	Fiedler et al., Microsystem Technologies, 2:1-7 (1995)
	D13	Fuhr et al., Biochim. Biophys. Acta, 1108:215-223 (1992)
	D14	Fuhr et al., Sensors and Actuators A., 41:230-239 (1994)

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EXAMINER INITIALS		CITATION
	D15	Fuhr et al., Cellular Engineering, Autumn:47-57 (1995)
	D16	Fuhr et al., Sensors and Materials, 7:131-146 (1995)
	D17	Gascoyme et al., IEEE Transactions on Ind. Appl., 33:670-678 (1997)
	D18	Green and Morgan, J. Phys. D: Appl. Phys., 30:L41-L44 (1997)
	D19	Hagedorn et al., Electrophoresis, 13:49-54 (1992)
	D20	Hagedorn et al., J. Electrostatics, 33:159-185 (1994)
	D21	Hawkes et al., Microbios., 73:81-86 (1993)
	D22	Huang and Pethig, Meas. Sci. Technol., 2:1142-1146 (1991)
	D23	Huang et al., Phys. Med. Biol., 37:1499-1517 (1992)
	D24	Huang et al., J. Phys. D: Appl. Phys., 26:1528-1535 (1993)
	D25	Huang et al., Phys. Med. Biol., 40:1789-1806 (1995)
	D26	Huang et al., Biochim. Biophys. Acta, 1282:76-84 (1996)
	D27	Huang et al., Biophys. J., 73:1118-1129 (1997)
	D28	Huang et al., Biochim. Biophys. Acta, 1417:51-62 (1999)
	D29	Hughes et al., Biochim. Biophys. Acta, 1425:119-126 (1998)
	D30	Huston et al., Proc. Natl. Acad. Sci. USA, 85:5879-5883 (1988)
	D31	Ladurner et al., J. Mol. Biol., 273:330-337 (1997)
	D32	Liakopoulos et al., Transducers '97, pp. 485-488 (1997)
	D33	Markx et al., Microbiology, 140:585-591 (1994)
	D34	Morgan et al., Biophys. J., 77:516-525 (1999)
	D35	Muller et al., Biosensors and Bioelectronics, 14:247-256 (1999)
	D36	Newton et al., Biochemistry, 35:545-553 (1996)
	D37	Price et al., Biochim. Biophys. Acta, 954:221-230 (1988)

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OTHER DOCUMENTS
(Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIALS		CITATION
	D38	Schnelle et al., Biochim. Biophys. Acta, 1157:127-140 (1993)
	D39	Stephens et al., Bone Marrow Transplantation, 18:777-782 (1996)
	D40	Wang et al., J. Phys. D: Appl. Phys., 26:1278-1285 (1993)
	D41	Wang et al., Biochim. Biophys. Acta., 1243:185-194 (1995)
	D42	Wang et al., IEEE Transactions on Industry Appl., 33:660-669 (1997)
	D43	Wang et al., Biophys. J., 72:1887-1899 (1997)
	D44	Wang et al., Biophys. J., 74:2689-2701 (1998)
	D45	Washizu et al., IEEE Transactions on Industry Appl., 26:352-358 (1990)
	D46	Washizu et al., IEEE Transactions on Industry Appl., 30:835-843 (1994)
	D47	Whitlow et al., Protein Engineering, 6:989-995 (1993)
	D48	Yang et al., Anal. Chem., 71:911-918 (1999)

Examiner Signature		Date Considered	
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